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RATIONAL VS EMOTIONAL MESSAGING INFLUENCE ON CONSUMER RESPONSE
IN B2B POP-UP ADS: EXAMPLE OF WEEKDONE

Bachelor's Thesis

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I have written this Research paper independently. Any ideas or data taken from other authors or other sources have been fully referenced.


Signature: 

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Introduction

The number of internet users worldwide is around 63% of the global population (Statista Research Department, 2022). With more than half of the world surfing the internet either on desktop, mobile, or tablet – the competition among companies who offer their products or services online through digital marketing is extremely high. Digital marketing is marketing on the internet via different channels like website, online advertising, email, blog, social media, public relations, and mobile (Miller, 2012). Not only is competition high, but benefits are great. A McKinsey & Company (2017) study showed that firms who adopted digital media cut costs by 40%-60% and grew their revenue 5 times that of their peers (as cited in Fraccastoro, Gabrielsson & Pullins, 2021). When speaking of companies, or businesses, it's common to categorize them into two sub-groups: Business to Consumer (B2C) companies and Business to Business (B2B) companies. The major difference lies in who makes and completes the transaction. First, B2C transactions occur directly from the company to the end-customer. B2B companies are different in that businesses are buying products to use for their benefit – adding complexity to the business model, such as pricing and payment terms, and who exactly evaluates the product or service before the purchase. (Kenton, 2022; Chen, 2022) Ultimately, these different business models require different advertising approaches to reach their customers.

Not only should one consider the difference in audience, the importance to study and evaluate the effectiveness of different digital advertising messages, methods, and channels – as these also play a role in the growing online competition. Digital media channels used in both B2B and B2C markets are social media applications i.e., Instagram, Facebook, and LinkedIn, or a company's website or blog. The methods for online advertising range from video to text – either static on a page or dynamic, interruption-based advertisements like pop-ups. A pop-up is an advertisement that shows on a user's browser, interrupting the website visit with a targeted, specific message. The main goal is for the user to act or click on the call-to-action (CTA). In most cases the CTA comes in the form of hypertext links, banners, or buttons. (Bartos & Habarta, 2019) The success of pop-up advertising is mainly studied in the B2C market. For example, pop-ups effectiveness in online gaming, financial aid, movie review websites, and e-commerce. Additionally, the effectiveness studied has mostly been related to design elements, for example, how intrusive is the ad, when does an advertisement appear, what is the context of the message related to the page shown, or the relation to a business brand. (Abbasi, Rehman, Hussain, Ting, & Islam, 2021; Edwards, Li, & Lee, 2002; Chan, & Tan, 2010)

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While the research on pop-ups for B2C companies has been robust, there is a lack of research for B2B companies using pop-up ads and how to effectively communicate the message at the right time. To fulfill the research gap for B2B companies who want to understand the effectiveness of pop-up ads messaging for the complex audience, the author will review two well-researched types of message appeal – rational and emotional. Emotional messages pull at one's emotions or heartstrings – regardless of a positive or negative feeling. Rational messaging is the more informational tone used to persuade users to go through a rational thought process. (Bagozzi et al. 1999) While marketing to B2B businesses one would assume using an informational tone for the rational buyer like CEOs and decision makers would be the obvious choice. However, these decision makers are people too, so emotions are additionally important. Where to draw the line between the rational vs emotional appeal in messaging should be considered when writing copy for an advertisement. The author will use previous studies related to message appeal in advertising, coupled with what studies have shown about pop-up advertisement effectiveness, to provide B2B digital marketers a roadmap to get more clicks from website visitors who intend to test a product or make a purchase. In the author's research, she will use the Software as a Service (SaaS) B2B company, Weekdone, as a case study. The author will use quantitative data collected from the website as well as an ad specific software, OptinMonster, used by the marketing team in Weekdone. The company has the means to collect this data to make more informed decisions regarding the elements of design and messaging for different ad variations.

The aim of this work is to find how rational vs emotional messaging used in B2B pop-up ads will influence consumer response in website visitors. The author will cover the following tasks based on previous studies to fulfill the research aim:

- Explain the benefits, reactions, and types of interruption-based advertisements;
- Share factors influencing clickthrough rate in B2B pop-up advertisements;
- Define and explain rational and emotional appeal studies in B2B advertisements;
- Run a qualitative neuromarketing test to validate the emotionality of pop-up advertisements to be used in the main quantitative test;
- Conduct a quantitative A/B test live on weekdone.com website;
- Present the findings of conducted research to compare and discuss whether new findings were uncovered, or results were aligned with previous studies on the topic;

This thesis will consist of two parts, the theoretical section where the author will complete the first three tasks to develop a framework from existing literature. This theoretical

framework will be used to support the empirical section of the thesis. In the empirical section, the author will take learnings from literature to create and run a qualitative study at the neuromarketing lab at the University of Tartu. Upon completion and analysis of that study, the author will use the information to run a final experiment on weekdone.com to test whether the assumptions related to marketing message appeal hold true, or not. To conclude, the author will share and analyze the results of both experiments and discuss whether the findings from this study are correlated to previous works.

The author would like to thank Jüri Kaljundi, CEO of Weekdone for allowing the study to be run on the company websites. Thank you to the Marketing and Design teams in Weekdone for sharing their enthusiasm to run such experiments. And to the author's thesis supervisor, Andres Kuusik, for helping bring this work to its full potential. Final appreciation goes to the University of Tartu Marketing department for lending resources and top tier Neuromarketing lab equipment to facilitate the qualitative study alongside the author. Keywords: pop-up advertisements, digital marketing, B2B marketing, B2B marketing messages, rational and emotional appeal, marketing messaging, advertising for MQLs

1. Theoretical framework for B2B popups to influence consumer response

1.1 Benefits, reactions, and types of interruption-based advertisements

In this section, the author will introduce the benefits of interruption-based advertisements, different reactions a consumer may have related to these ads, and three common types of interruption-based advertisements a website visitor may encounter.

Interruption-based advertising has been effectively used to communicate with and catch the attention of an audience for years, across many different mediums. Interruption-based advertising is described as “carried out through forced exposures to advertising content, thus, disrupting the natural continuous flow of program content...”. (Chan & Tan, p. 365, 2010) Since the beginning of television and radio commercials, consumers have become familiar with this form of advertising – even now online. Digital marketers should understand that due to the competitiveness of the digital medium, they must effectively appeal to any visitor traffic they get to their website as it could be the first and last time someone enters. Le and Vo (2017) infer that interruption-based advertising is a good way to maintain this attention as it is associated with greater levels of consumer attention and higher clickthrough rate. On the other hand, it can also result in negative customer attitude due to their invasiveness. Therefore, it's so important to choose the right strategy with this digital marketing method - even tailoring these ads to provide more customer value has shown to reduce irritation with pop-ups. (Edwards et al, 2002) The benefits go further as online

advertising has said to have the advantage of lower costs than traditional media and it gives businesses the ability to target very specific markets and even individuals. (Disastra, Hanifa, Wulandari & Sastika, 2019) Researchers refer to this targeting as, Online Behavioral Advertising (OBA), when an advertisement is tailored to individuals’ interest by using personal data collected from the consumer’s previous online behavior. (Aiolfi, et. al., 2021; Boerman et al., 2017; Varnali, 2019) This appeals to marketers because when a website visitor accepts the tracking measures, analysts can collect information about the user’s single session on a website – for example, how many and which pages they visited within the site, have they previously been shown the advertisement before, and demographic trends in the audience like age, gender, and location. The low-cost advantage and accurate targeting can be huge benefits to marketers - assuming they use the insights and make modifications to an existing ad to increase its appeal.

Interruption-based advertisements do come with varying consumer reactions. One of the most studied has been ad avoidance. These types of avoidance among users are defined by Li & Huang (2016) in table 1 below.

Table 1

Types of ad avoidance on the internet

Type of ad avoidance	Description
Cognitive	A psychological defense, rooted in consumers beliefs. Deliberately ignore
Behavior	Take action to ignore, dismiss, or close off contact to an ad
Affective	An expressive negative feeling or emotional reaction

Source: Li and Huang (2016)

Li and Huang (2016) among other studies have found that these negative responses are common. Due to all the web surfing consumers are engaging in, companies should consider that users are not exclusively visiting their website – they are often clicking between various websites to compare costs or information – therefore, it’s possible they receive advertisements from every angle. This could lead to negative cognitive avoidance, for example the defense against all advertisements on the web – installing ad blocker software. In 2019, the number of AdBlock plugin users was 763.51 million worldwide, this includes desktop and mobile browser and plugin downloads. (Statista Research Department, 2023) When speaking about a positive reaction to pop-ups, the author will refer to a high clickthrough rate. Clickthrough rate is a method used by digital marketers to measure the

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effectiveness of a live advertisement. It has been one of the most methods used to measure the effectiveness of banner ads (Sigel, Braun, & Sena, 2003). As defined by Google Ads (2022), the clickthrough rate (CTR) is a ratio that shows how often people see an ad and end up clicking on it. CTR equals the number of clicks on an ad divided by how many times it was seen (impressions). This can be used to compare a company's ad history, to better understand which elements worked best and analyze why. Agarwal, Chen, and E., P (2009) state that a measure like clickthrough rate is connected to immediate user feedback and helps assess the quality of the content shown due to the reliance on user clicks marketers gain a strong signal with readily available data. Moving forward in this thesis, clickthrough rate will be the means to measure consumer response – a high clickthrough rate correlates with a more positive consumer response, and visa-versa.

To discuss the types of interruption-based advertisements online, these are often related to the placement of the ad in a browser. Figure 1 shows the most used browser ads among digital marketers and the placement of those ads on a user's browser.

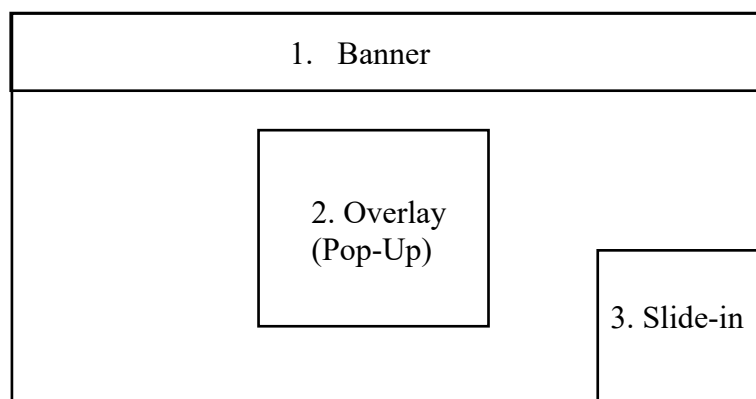


Figure 1. Interruption based advertisements and their relative placement on a web browser

Source: Chatterjee, 2008; Pratt et al. (2010) and author's contribution

Chatterjee, P. (2008) shares that banner ads have been known as voluntary exposure ads related to cognitive avoidance. The banner is shown automatically and occurs parallel with browsing activity; therefore, it doesn't require any behavioral action from the consumer. The second type of ad, overlay, what we refer to as "pop-up" requires a behavioral response from the consumer, either to process the information shown or physically avoid it by clicking to close it and resume their original activity. Pratt et al. (2010) shares in their research on animation that slide-in advertisements can be effective in holding a user's attention and gaze, even in a user's peripheral vision. When an ad slides in or changes position on the page, or changes pace, it will catch the attention quicker than those who fade into place gradually.

Research similarly discovered that when comparing pop-up to banner advertisements, pop-ups have a significantly higher level of ad perception, clickthrough rate, and purchase intention comparatively. (Cho, Lee & Tharp 2001; Sundar & Diao, 2004) It can be inferred from this discovery that among the frequently studied interruption-based advertisements, pop-ups are among the most effective and should still be used if the irritating elements of the display are minimal, and the ad provides value to the visitor's interaction.

To conclude, there are many interruption-based advertisements that can grab the attention of a website visitor, and pop-ups are among the most effectively used today. Still, there is a fine line that marketers must walk to ensure the advertisement is appealing, non-invasive, and removes all possibilities that a visitor may take part in any of the three previously discussed ad avoidance types. In the next section, the author will look further into consumer response to determine factors that may influence a positive response – yielding a high clickthrough rate - from the website visitor who sees a pop-up advertisement on a website page.

1.2 Factors influencing clickthrough rate in B2B pop-up advertisements

In this section, the author will analyze previous studies made on how to increase positive reactions (more clicks) from B2B consumers, while decreasing the negative reactions (ad avoidance).

Bartos and Habarta (2019) studied the role of text on a website, stating that one important element related to clickthrough rate is the link text, declaring that to receive clicks, the text should be: unique, descriptive, start with keywords, and contain call-to-action text. Nelson (2009) tested among B2B companies how important the first 11 characters (2 words) are to generate clicks. The study found the most effective clickthrough rates happened when:

- The user understands where the link will take them (context);
- Plain language is used;
- Specific terminology is used;
- Conventions for naming common features are followed;
- Use action-oriented terms and make clear what the user will gain.

Another commonly spoken of factor that influences clickthrough rate on advertisements is perceived intrusiveness. One study conducted on social media pop-ups tested the perceived intrusiveness with the following factors: interference, disturbance, obstruction, intrusion, annoyance, and forcefulness. The results showed that pop-ups are deemed obstructive. The study from the same research found that these ads are mainly

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obstructive when they interfere with a user who is trying to achieve a goal (Wang, Ampiah, Xu, & Wang, 2014). Even more, some design elements may impact whether these pop-ups are seen as obstructive, for example the size of the ad – if the ad is larger, it will unexpectedly cover more space and interrupt the user’s experience. (Chatterjee, 2008) However, for the B2B consumer, there may be cases where intrusiveness is overlooked. Zeng, Kohno, and Roesner (2021) had success in categorizing positive and negative associations related to online advertisements. The following list are those falling in the positive category:

- The ad is entertaining and engaging;
- The ad has good style and/or design;
- The user has interest in the product or topic;
- The ad is simple, straightforward;
- The user trusts the advertiser, the message has a genuine tone;
- The ad offered something useful, interesting, and informative.

Ad personalization is common among online advertisers as means to grab user attention and create positive attitude toward the advertisement and brand overall. Hsu and Fu (2018) found that personalized pop-up ads generated better ad attitude and recall than non-personalized pop-up ads. One solution organization’s use to personalize ads to specific users is through Online Behavioral Advertising (OBA), or Behavioral Targeting (BT) methods, which refers to the “delivery of ads to targeted users based on information collected on each individual users web search and browsing behaviors”. (Yan et al., p 261, 2009) OBA is effective; however, it has raised privacy concerns with consumers. One example of measures taken to improve the concerns, is the European Union’s GDPR (General Data Protection Regulation) law for all countries within the EU. This law requires organizations to “self-assess their operations and take necessary steps to comply with GDPR on an on-going basis, ensuring that the level of compliance is proportional to the level of risk inherent to the processing operations carry”. (Mondschein & Monda, p. 57, 2019) This overt data collection method has been found to lead to greater clickthrough rates, as opposed to firms who are less upfront about how they collect data. Firms are seen as more trustworthy when showing their compliance and giving the consumer a choice in the matter (Aguirre et al., 2015).

The final factor that could influence clickthrough rate among B2B pop-up ads, is the customer buying journey. The buying journey is defined in stages where marketers determine the consumer or “lead’s” readiness to purchase. The first stage is the awareness stage, where the consumer recognizes they have a business problem, sometimes referred to as Information

Qualified Lead (IQL). The second stage is the Evolution stage, where the consumer has the information needed and begins to explore solutions to that problem while assessing strengths and weaknesses of each possible solution. In this stage, consumers can be referred to as Marketing Qualified Leads (MQL). Finally, in stage 3, the decision stage, where the Sales Qualified Lead (SQL) validates and justifies one solution to their problem. In figure 2, the author breaks down those buying stages and lead types (Marvasti et al., 2021). The buying journey is related to a consumer’s readiness to purchase. Wijaya and Yulianti (2020) found in their study that when a consumer’s purchase intent increases (the closer they are to the final decision stage), a pop-up advertisement has little to no impact on that buying decision. Figure 2 below depicts this relationship between ad influence and B2B consumer purchase intent.

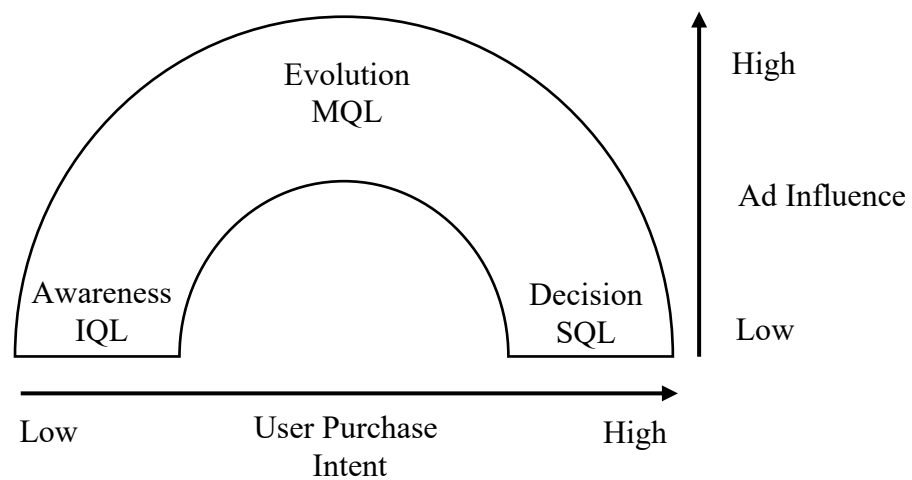


Figure 2. Relationship between purchase intent and ad influence across the buying journey
 Source: Wijaya and Yulianti (2020) and author’s contribution

Figure 2 reveals that though marketers may be tempted to flood an Information Qualified Lead in the Awareness stage of the B2B buying journey with more information about their product through increased advertisements – this may decrease the consumer’s growing interest in a suitable product, pushing them to seek out an alternative solution to their problem. At the same time, when a Sales Qualified Lead in the final Decision stage of the B2B buying journey views a pop-up, it will have little to no effect on their behavior. Through this finding, the author believes the most crucial buying stage for marketers to focus and optimize their pop-up advertising strategy for is the Marketing Qualified Leads in the Evolution stage.

Through this literature review, the author has discovered four main factors that influence the effectiveness of a pop-up advertisement:

1. Link text;
2. Perceived intrusiveness;
3. Ad personalization and data collection methods;
4. The B2B consumer buying journey.

To conclude, it's important that B2B marketers create non-obstructive pop-up advertisements that promote a clear offer at the right moment for the user. Businesses should adhere to country data compliance regulations and be upfront with website visitors, to create a trustworthy brand image from the first interaction. Further, upon doing so, marketers can gain useful insights regarding their consumers intention upon entering their website and make decisions for personalization of an advertisement for a specific stage in the buying journey.

1.3 Rational and emotional messaging appeal in B2B advertisements

In this section, the author will analyze previous literature about rational and emotional messaging appeal. From these studies, the author can make assumptions about which appeal would influence the clickthrough rate in B2B pop-ups and use this as grounds to create advertisements for the empirical study.

A large part of marketing is communicating a specific message and delivering that message to the right person at the right time. However there are some discrepancies when it comes to choosing the optimal message that speaks to the B2B consumer, as they are often considered more rational than emotional. The consumer in the Awareness stage of the buying journey requires a different message the one in the Decision stage, and even further, individuals are very different. Over time, many studies have considered the variation of messages using rational vs emotional appeal to the consumer. In table 2, the author has compiled definitions of the two types of appeal to further explain the meaning to the reader. To narrow down these definitions, the author would like to pinpoint keywords associated to both appeals. Rational appeal keywords are facts; product-related; and objective benefits. Emotional keywords can be classified under the keywords, self-related; attention; and beliefs - either positive or negative. The author will use Appendix A, classification of rational and emotional appeals to create the advertisement's used in the empirical part of the thesis.

Table 2

Rational vs emotional appeal in advertisements

Source	Rational	Emotional
Chandy et al., (2018)	“Argument based-ads” which highlight at least one factual benefit related to the use of service.	Ads that highlight at least one emotional benefit related to the use of service.
Kolter & Armstrong p. 417 (2008)	Relating to the self-interest of an audience. Highlighting the quality, economy, value or performance of a product or service	A communicator’s attempt to bring negative or positive emotions to a consumer to motivate a purchase. Further attracting more attention and to create belief in the brand.
Yoo & MacInnis, (2005)	Using objective information to describe a brands attributes or benefits	Using drama, mood, music, and other emotion-eliciting strategies

Source(s): Chandy et al., (2018); Yoo & MacInnis (2005); Kolter & Armstrong p. 417 (2008)

Studies related to messaging appeal and its effect on consumer behavior, and attention show that advertisements using the emotional appeal have increased retention and memory among females more than males. (Baird, Wahlers, & Cooper, 2007) Another study finds that emotional advertising plays a major role in benefit-based brand positioning to create and nurture customer relationships. (Panda & Mishra, 2013) Similarly, in B2B decision makers – the appeal of emotional content is positively related to their engagement and advocacy they have with a supplier. And related to buying decisions, non-corporate level employees who engage in more tactical buying are much more influenced by emotional appeals than their C-level buyers who prefer the balance of objective, hard facts with softer perspectives. (Kemp, Briggs, & Anaza, 2020) A study in B2B financial services advertisements found that participants acknowledge the emotional appeal, but they are more interested in facts and figures that help them decide – reflecting the need for a benefit-driven decision-making process. (Mogaji, Czarnecka, & Danbury, 2018) These study results may lead a marketer to believe that regardless of gender, emotional appeal alone is the optimal choice of messaging when the goal is to gain brand recognition and customer loyalty over time. However, as the author is studying the effectiveness of B2B pop-up advertising messages for consumers in the decision-making stage of the buyer’s journey, it is still not so clear. When testing a rational vs. emotional messaging sequence in a single ad, one study concluded that emotional to rational sequence produced more favorable attitudes toward the product than the opposite

sequence – rational to emotional. This was consistent, regardless of gender and only true for product brand i.e., Mustang, not corporate brand, i.e., Ford (Lim, Teh, & Ahmed, 2018). This choice of emotional to rational sequencing may be an interesting perspective to test in this study for pop-up advertisements, as learned that B2B decision makers are not averse to emotional appeal, and it yields positive relationship to a brand.

The author will use the information learned in this theoretical chapter to create guidelines for the empirical study, where the results will yield insights into how B2B marketers can achieve higher clickthrough rates in their pop-up advertising. Given what the author has learned about the factors influencing consumer behavior and messaging appeal, the author should create a pop-up advertisement with a non-invasive design and ensure the message (rational or emotional) is clear to the user, while adding value to their experience to achieve a positive response. The author will test variations of rational-focused and emotional-focused messaging to users in the Evolution stage (MQL) of the buying journey.

2. Rational vs emotional messaging influence on clickthrough rate in B2B pop-ups

2.1 Methodology to measure influence of messaging on clickthrough rate

The author will measure how rational and emotional messages influence a B2B consumer’s response to a pop-up advertisement on a website. The different phases of the research are outlined in figure 3 below.

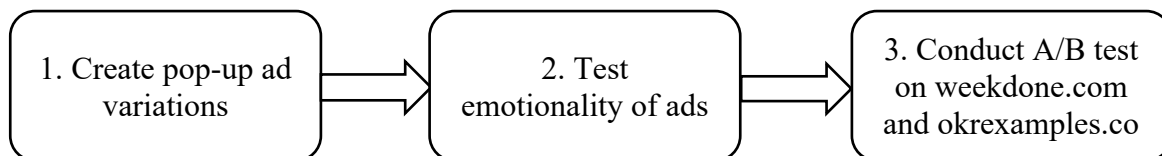


Figure 3. 3 Phases of empirical research

Source: Author’s creation

In the first phase of research, the author had to create variations of the pop-ups. In the literature, Albers-Miller and Stafford (1999) characterized rational and emotional message appeals with different keywords, these are shown in Appendix A. From this list, the author chose 10 keywords to work with (5 rational and 5 emotional). Once the keywords were chosen, the author created headlines for each keyword based on suitable context for the Weekdone brand. With the 22 initial headline variations, to remove bias, the author made a poll to be shared with Weekdone employees. The employees were told to choose the top headlines based on how they felt each would resonate with the company’s ideal customer and matched the company brand. Table 3 shows the rational appeal keywords and headlines created. Table 4 shows the emotional appeal keywords and headlines created. Both tables

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indicate with asterisk which headlines were chosen based on the Weekdone employee poll. Once the most popular headlines were agreed upon by the company members, the author then chooses corresponding images for each headline. The author will test different variations for each advertisement. The goal is to choose one optimal advertisement among four different pairings:

- Rational headline with rational image – strictly rational;
- Rational headline with emotional image – sequencing, rational to emotional;
- Emotional headline with emotional image – strictly emotional;
- Emotional headline with rational image – sequencing, emotional to rational.

Table 3

Rational appeal keywords and created headlines

Rational	Headlines		
Effective	Establish organizational structure, roles, and expectations with OKRs*	Level up your management approach with OKR software	Drive 10x better performance with OKR software*
Longevity	Manage the fast track to company growth with OKRs	OKR software to support business beyond scale	Manage business growth with OKR software
Convenience	See real-time business results with 1 click	View, track & manage OKRs with ease*	
Productivity	Achieve 10x business growth	Generate better business outcomes with Weekdone	
Use of technology	Percent-complete tracking for clear OKR visualization	Auto-import OKRs, KPIs, and more with integrations	

Source: Albers-Miller and Stafford (1999) and author's creation

Notes: * Indicates the headlines chosen for phase 2 testing

Table 4

Emotional appeal keywords and created headlines

Emotional	Headlines	
Popularity	Serving thousands of companies since 2013*	Be like Intel & Google*
Assistance	Lead engaging meetings with interactive dashboards	Tracking OKRs is better together
Exclusivity	Company-wide insights at your fingertips*	Your complete overview of company performance
True to tradition	Your dedicated OKR platform	Focus, Align, Track & Stretch for Amazing
Membership	"I wish I had this tool years ago" *	Gain OKR knowledge and support with in-product features

Source: Albers-Miller and Stafford (1999) and author's creation

Notes: * Indicates the headlines chosen for phase 2 testing

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The author believes that these variations will be helpful to determine whether emotional or rational messages are more effective alone in one advertisement, or if the optimal sequencing theory of emotional to rational message (Lim, Teh & Ahmed, 2018) holds true when applied with images and text. The author will create ads with minimalistic design, original to the Weekdone brand, with the only changing elements being, the image and message. The Call-to-Action link text will be the same among all advertisements. This will help the author to analyze strictly the messaging element.

In the second phase of the research, the author will test the emotionality of the advertisements by using FaceReader software in the neuromarketing lab at the University of Tartu. The goal is that by testing rational vs emotional appeal in messaging, we can hope to determine how “affective” the ad is - whether either message appeal type brings about a positive feeling association with the ad. The advertisements will be shown to a sample group of 25 business professionals in slideshow form. This software uses visual detection of facial expressions to record emotions from micro-movements in a person’s face. The author will be looking for detections in the degrees of happiness while the participant reviews the 8 advertisements displayed on the screen. The main criteria for choosing sample participants are that the individuals will be working professionals living in Tartu, Estonia. Participants can work in various sectors - and demographics like age, and gender will not be documented as they are deemed unimportant for this stage of the experiment. Following the slideshow, the author will have the participants answer a survey with 4 multiple choice questions related to the headlines and images individually. From this survey, the author wants to dive further into the perceived value (rational) and interest (emotional) each message and image had on the participant. Find the survey in Appendix B.

In the final stage of the research the author will run a quantitative A/B test on weekdone.com. According to Kaufmann and Garivier (2014) A/B testing is a way to test and optimize a website page, or advertisement. Two versions of a page, or in this case - advertisement, are compared and then presented to users – each user will only see one of the two versions; the goal is to determine which ad is preferable to the user. A standard objective for the test is to determine which page has a higher conversion rate based on binary feedback from the user. The author will refer to the conversion rate as clickthrough rate when speaking about the effectiveness of an ad – this is the ultimate end goal that will measure the success or failure of an ad over another. The author wants to reverse the “behavior” and “affective” ad avoidance types mentioned in Table 1 in section 1.1 of the literature review. It’s common to

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say that an ad is effective when the viewer clicks the CTA through to the next sales page, instead of deliberately closing out of the ad – to oppose the “behavior ad avoidance”.

In the case of this experiment, the author will take the analyzed results from the qualitative neuromarketing study and run 4 advertisements that yielded the most emotion as A/B tests on weekdone.com and okrexamples.co. The author will take the insights learned from the sample group to determine which ads will be shared on both websites. On weekdone.com, the author will choose 4 ads with the following pairings of image and headline:

- Rational headline with rational image – strictly rational;
- Rational headline with emotional image – sequencing, rational to emotional;
- Emotional headline with emotional image – strictly emotional;
- Emotional headline with rational image – sequencing, emotional to rational.

The segment of users who see the advertisement on weekdone.com are those visitors from “key converting countries” which includes the United States and countries in the European Union. During March 9-March 31, 2022, these resources pages had 5,764 sessions. The whole website had 40,297 sessions during the same time, this is useful to the author since the experiment is planned to run in March 2023. This sample size – will be adequate to run a meaningful test. From this segment, the advertisements will be shown across pages in the resources section of Weekdone.com, only when users scroll 50% of the page, or have been on the page for 30 seconds. This could show the users high intent to read and engage with the resource’s material, satisfying the optimal stage of the buyer’s journey, those in the second, Evolution stage of the buyer’s journey, looking to assess strengths and weaknesses of products. The okrexamples.co website is different than weekdone.com, as the user is likely in the Awareness stage of the buying journey. The website is not focused on directly selling a product, rather assisting the visitor to write better goals as a team or company using the Objectives and Key Results methodology. The 2 advertisements that will be tested on this page are:

- Rational headline with rational image
- Emotional headline with emotional image

The author chose not to segment the visitors by country on this website, but rather show the pop-up after 15 seconds on any page. The author will pause all other advertisements on the website during this time, as to not disrupt the visitor’s goal “to learn about OKRs”. In one month, okrexamples.co drives about 1,200 visitors to weekdone.com through various

links and pop-up advertisements. The following hypotheses are made by the author for each website:

On both weekdone.com and okrexamples.co, the author will measure the effectiveness of an ad through the clickthrough rate (the ratio of impressions/clicks) from the CTA, which brings them to the sales page to learn more about Weekdone’s product. The advertisement with the highest clickthrough rate will be seen as the optimal advertisement, meaning the messaging had the most influence on their decision to click for more.

2.2 Results from empirical study phases 2 and 3

To begin sharing the results of the experiments, the author would like to start with the results from phase 2 – the testing of emotionality of ads among 25 sample participants using FaceReader software at the neuromarketing lab. It’s important to mention that the author was only able to gather information from 21 of the 25 participants, due to the sensitivity in tracking, the software is unable to capture accurate facial movements when the face is not within optimal distance from the camera. Luckily, this didn’t have a negative impact on the results since the author hoped for 20 viable participants in the end. Once the test was finished, the author exported the results into Excel and normalized the data by calculating average scores for each pop-up advertisement separately, these averages are shown in table 5 below. By creating 2 ads for each message pairing, the author could compare them together and realize that the pop-up with higher average among the two would be the optimal one to test for the quantitative study.

Table 5

FaceReader results (averages) for pop-up variations

Pop-up message combinations	Average
Emotional Headline w Emotional Image 1	0,033
Emotional Headline with Emotional Image 2	0.037*
Rational Headline w Rational Image 1	0,051
Rational Headline w Rational Image 2	0,056*
Emotional Headline w Rational Image 1	0,047
Emotional Headline w Rational Image 2	2E-02
Emotional Headline w Rational Image 3	0,054*
Rational Headline w Emotional Image 1	0,071*
Rational Headline w Emotional Image 2	0,042

Source: FaceReader results from author’s experiment

Notes: *indicates chosen advertisement for phase 3 of testing

Further, to understand deeper, the survey results also helped the author to either confirm or deny those assumptions. For the emotional pop-ups (emotional headline, emotional image) the 2nd variation received a higher score of positive emotion – see Table 5.

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Figure 4 shows how the results of the survey support this - of the emotional headlines chosen, “Be like Intel & Google” received the highest number of votes for interesting users to start a free product trial.

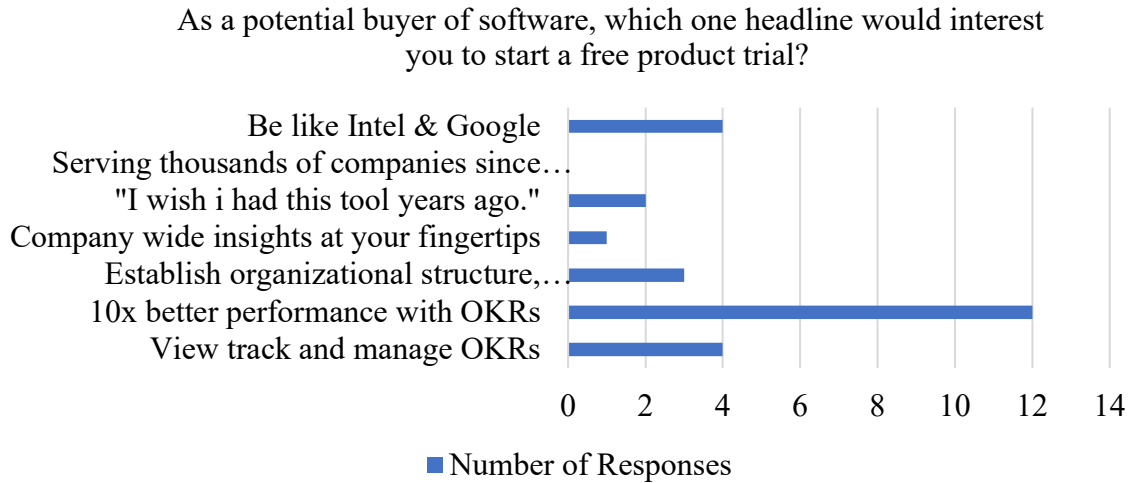


Figure 4. Survey results regarding headline interest for participants

Source: Authors qualitative supporting survey results

Figure 5 below shows the chosen emotional pop-up to be used for the qualitative study based on these results.



Figure 5. Pop-up for weekdone.com with emotional headline and emotional image

Source: Authors creation from optinmonster.com

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For the 2 rational (rational headline, rational image) pop-ups, the FaceReader results shown in table 5 are almost equal. However, the first ad still received fewer positive emotions with an overall average .051, slightly lower compared to version 2 which had average of .056. Though it can be said that they are very similar, since less participants had positive reactions to version 1, the author will choose version 2 to move forward with. The survey results from figure 6 below support this - as the text used for this ad “View, track, and manage OKRs with ease” offered the most value in helping users make their decisions, therefore it is indeed rational.

As a potential buyer of software, which one headline offered the most value to help you make your decision?

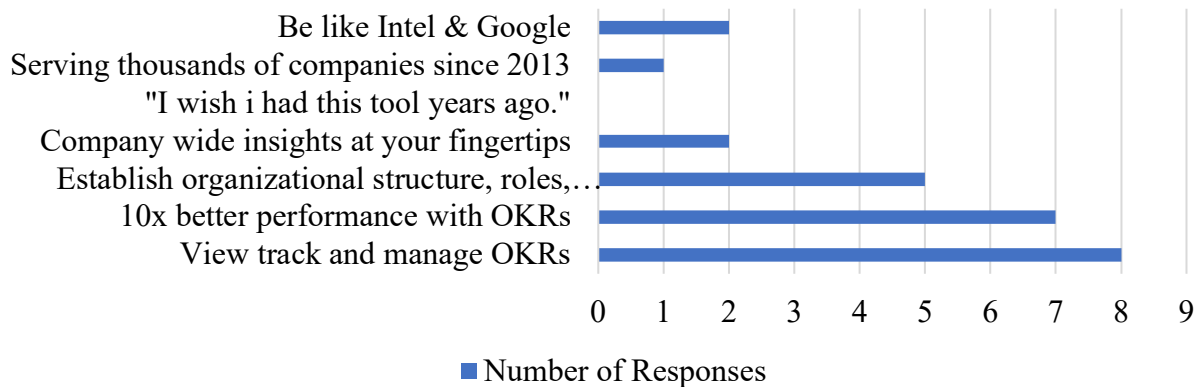


Figure 6. Survey results regarding headline value for participants

Source: Authors qualitative supporting survey results

The author chose to change the picture from option 4 to option 5. This is because it was used in 2 ad variations and in both cases, it received lower positive emotion than its opposite image. Further, the author notes that in figure 6 below, option 4 received a lower score than option 5.

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As a potential buyer of software, which one image offered the most value to help you make your decision?

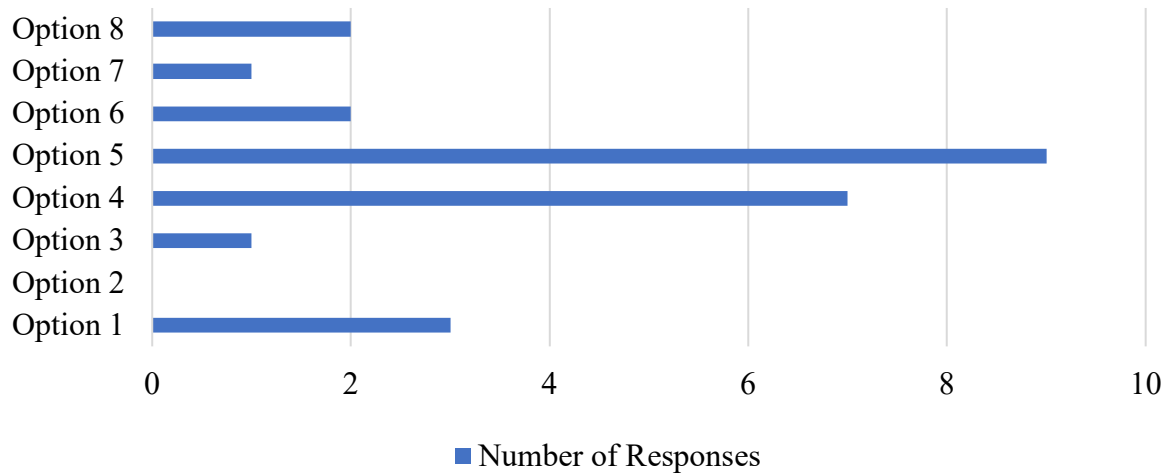


Figure 7. Survey results regarding image value for participants

Source: Authors qualitative supporting survey results

Figure 7 shows that image 5 offered more value than image 4 in helping participants make their decision to try the software. Meaning it could be said that it is the more rational option. All images are shown and labeled accordingly in Appendix B for reference. Figure 8 below shows the pop-up created with rational messaging for the live test.

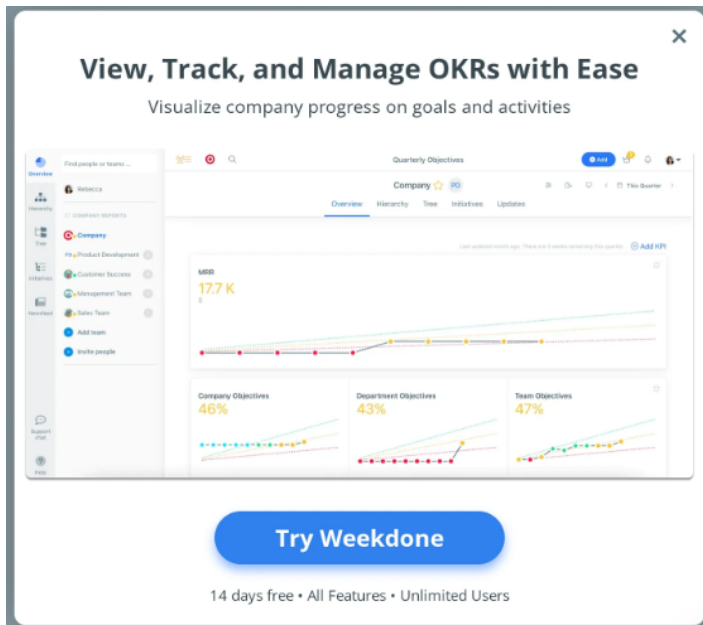


Figure 8. Pop-up for weekdone.com with rational headline and rational image

Source: Authors creation from optinmonster.com

For the 3rd ad variation, the author moves into the sequencing. Starting with 2 ads where the headline is rational, and the image is emotional. These results from Table 5 show that the first variation of this ad received the highest positive emotion score 0.071 among all

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the advertisements shown. Further, the second ad in this sequencing combination averaged at 0.042, which is significantly lower in this case. So, the author will choose the first option as the optimal one to test. See figure 9 for the chosen pop-up to be used for the live experiment.



Figure 9. Pop-up for weekdone.com with rational headline and emotional image

Source: Authors creation from optinmonster.com

Further for the opposite sequence - emotional headline with rational image - the author created 3 advertisements. The second advertisement received the lowest score of positive emotions, likely because there is a lot of text on the image. This tends to reduce the emotionality perceived from someone's face due to the increase of focus they spend on reading. The pop-up chosen for the emotional to rational sequence messaging to run live on weekdone.com is shown in figure 10 below.

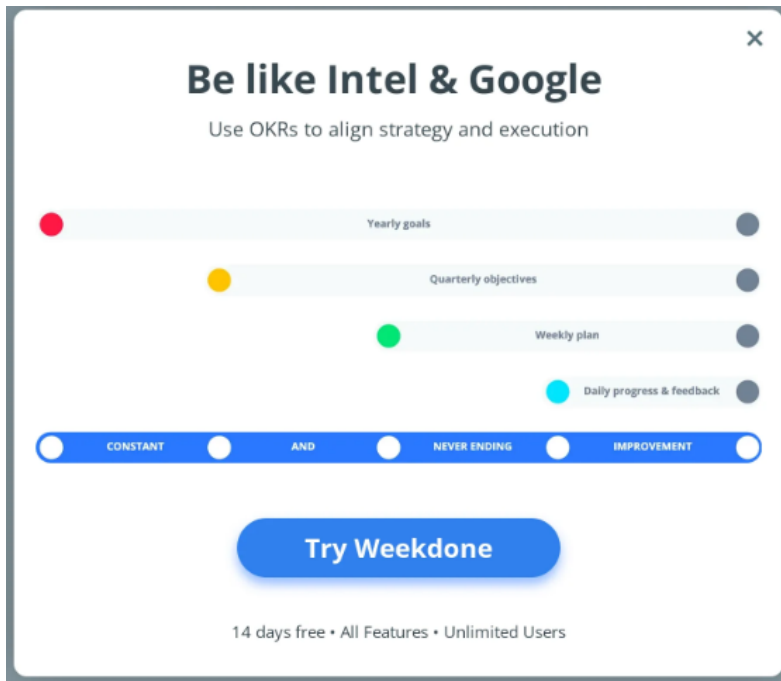


Figure 10. Pop-up for weekdone.com with emotional headline and rational image

Source: Authors creation from optinmonster.com

In fact, the opposite ad sequence with a rational headline with emotional image proved to yield the highest positive emotional response among the sample participants. These findings are inconsistent with Lim, Teh & Ahmed (2018). The author believes this could be because an image is the attention-grabbing element more so than the headline. However, it is still worth exploring because if to speak of attention grabbing, emotional images, figure 11 shows that image option 3 receives a higher interest score in the survey results than option 1.

As a potential buyer of software, which one images would interest you to start a free product trial?

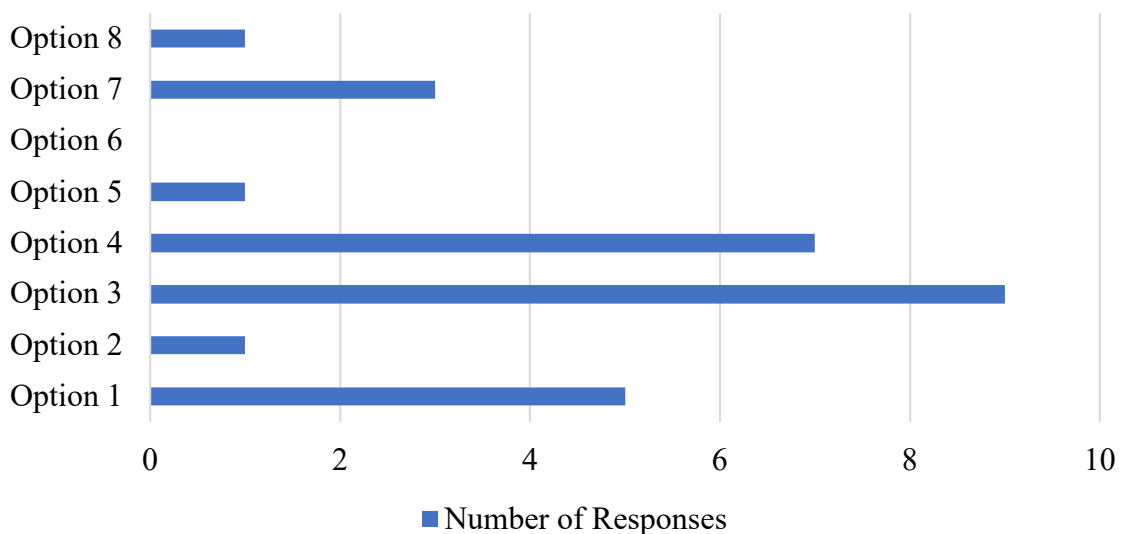


Figure 11. Survey results regarding image interest among participants

Source: Author's qualitative supporting survey results

Figure 10 results lead the author to believe that there is room for improvement with these advertisements, being that the image shown in the advertisement with the highest emotionality score still has a relatively low interest score among the participants. Therefore, the author could have even improved the positive impression among participants by modifying the advertisement with a better emotional image and corresponding text.

The 4 pop-up ads were run live on weekdone.com for 22 days. Each ad was seen from 465-503 times during this timeframe, and still saw 0 conversions, a 0% clickthrough rate, to conclude that neither emotional nor rational messaging had an influence on the impact of this specific advertisement cluster.

The author ran another test on okrexamples.co which was explained in 2.1. For this test, the author kept it simple, running the A/B test for half the time of the first test on weekdone.com – 10 days. Further, the author created 2 new advertisements, removing the sequencing from the mix. These 2 advertisements were the only 2 ads running live on the website during this time, could show on any page of entry, and triggered to pop-up when a visitor was about to exit the page. Figure 12 shows the rational messaging (headline and image) advertisement.

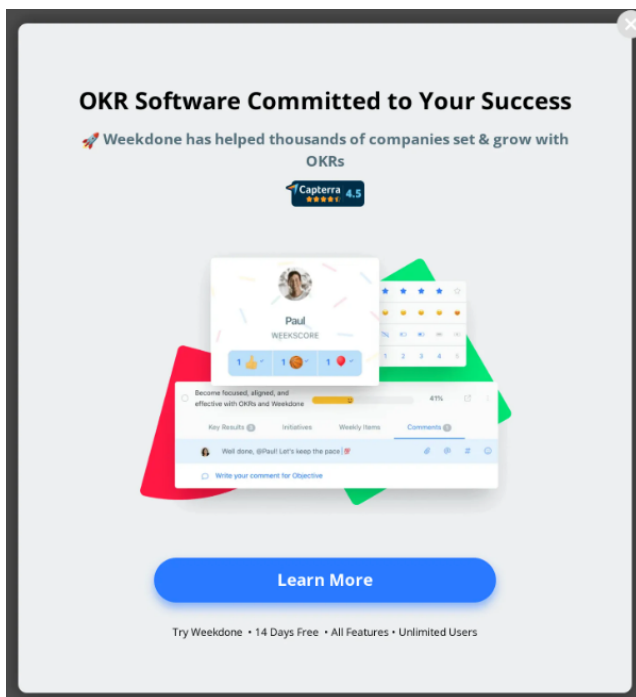


Figure 12. Pop-up for okrexamples.co with rational messaging

Source: Author's creation on optinmonster.com

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The pop-up shown in figure 12 was viewed by 690 visitors, received 3 clicks and gives us a clickthrough rate of .43%. This is already better than our weekdone.com study. However, the emotional messaging advertisement exceeded even the rational one on okrexamples.co. See figure 13 for the emotional messaging (headline and image) advertisement.

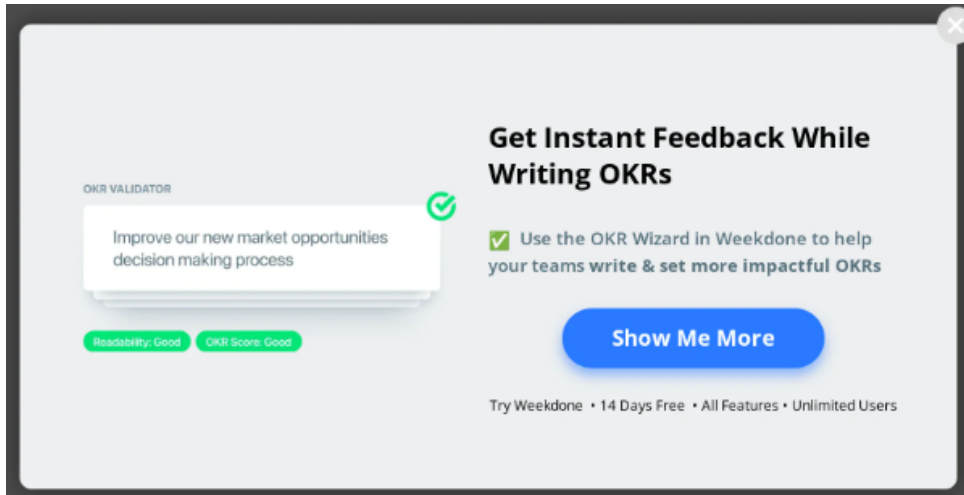


Figure 13. Pop-up for okrexamples.co with emotional messaging

Source: Author's creation on optinmonster.com

The pop-up shown in figure 13 had 1,605 visitors and gained 7 clicks, which leaves a .66% clickthrough rate on this ad. The pop-up advertisement with emotional messaging led to a higher clickthrough rate on okrexamples.co. To bring further validity to the results, the button text sends the visitor to weekdone.com where they can view the product's selling points on the main landing page. This indicates that a simple click on the "Show Me More" button is not already a guaranteed sale, it is simply an interested website visitor. However, when the author reviewed the website analytics there were 3 signups from this source, which makes it a 42% conversion (7 visitors to 3 signups) from the pop-up with emotional messaging. This proves to the author that the emotional messaging on the advertisement caught the attention and interest of visitors enough to want to test out the product for themselves.

2.3 Discussion and suggestions for future study

From the findings of this research, the author focused on finding out how rational vs emotional messaging used in B2B pop-up ads would influence consumer response in website visitors. Like studies conducted previously, the author found that it is rather difficult to prove whether one type of message appeal works better than another consistently, rather it is a combination of factors along with the message that influence a consumer's behavior. In the

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case of weekdone.com and the tested ads, the pop-ups were completely ineffective to drive positive consumer behavior. The author believes the main factor that influenced this behavior is that there was no value added to the visitor. It's possible, that as the author attempted to reach MQLs by waiting to show the ad at a 50% scroll, or 30 seconds on the article, disrupted a user's in-depth reading experience, which as Wang, Ampiah, Xu & Wang (2014) mention is irritating for the reader trying to achieve a goal. Potentially causing the behavioral ad avoidance of closing out of the ad before clicking through. Further, weekdone.com resources articles are already littered with CTA buttons in the text, in addition to header buttons in the navigation menu directing users to try the software for free. It's possible that the emotional advertisement could be impactful in that a new visitor later remembers the slogan headline, article, and information given and come back or click another button on the page to convert to sales. However, the pop-ups themselves were not clicked on, which means they were ineffective to reach the user as they avoided the advertisements all together. So, like studies have shown that emotional messaging tends to play a role in nurturing customer relationships and benefit-based brand positioning (Panda & Mishra, 2013) the author cannot conclude from this study that it is still indeed true in relation to pop-up ads. Past campaigns run on weekdone.com have been effective, so an ad with any of these message pairings could be tested again - for example when offering visitors a downloadable template or asking for an email address to sign up for a newsletter. However these marketing tactics are typically targeted at those leads seeking information in the first stage of the buyer's journey.

Whereas on okrexamples.co where the visitors didn't know about OKR software as a solution to their problem (Information Qualified Leads), the emotional headline and image were more influential for their decision to click and see more. Further research should be conducted for the Marketing Qualified Leads (MQLs) in the Evolution stage of the buying journey. Based on this research, the author believes that pop-up ads on a B2B company website would be effective to direct MQLs to a specific campaign to share a limited time discount, signup for a webinar, or other promotional materials rather than direct to sign up. Advertisements like the ones created for this study, are seemingly more effective for Information Qualified Leads, to grab the attention of the visitor by introducing a new solution to them. It is still clear that B2B pop-ups can be an effective way to gain eyes on a product, and even signups from new visitors.

For B2B marketers seeking a strategy to gain sales and conversion from pop-up ads, the authors best advice is to first consider which sources the company attracts visitors from, and how they arrived there. Next, marketers can understand what value those visitors would

gain from an advertisement. Ultimately, a pop-up should be used to catch interest while the direction it's pointed in should provide the value. Using rational or emotional messaging appeals and a combination of them can have positive impact on your results, however the testing never ends. Marketers should always continue testing, trying to understand consumers, and find ways to adapt their strategy to enhance a user's experience while their attention is focused on a website.

Possible suggestions for future studies would be to test messaging on ads that offer special discounts. Does an emotional tone appeal more than rational when it's related to the discount or offer at hand? Further, marketers should always consider where they place the advertisements, doing their best not to disrupt the visitor's original goal. Testing the message and showing it on a product page versus a homepage. Does using a rational message on these more sales-driven landing pages work better than on a blog or resources article? It's possible too that the message does not just come across in an image or text. Interruption based advertising software often allows for slide-ins to make a sound or enter the screen with some speed variations or special motion – studies could relate those movements or sounds to various appeals and see whether that has a positive influence on the consumer behavior.

Summary

The focus of this paper was to investigate how rational and emotional messaging influences customer behavior as related to pop-up advertisements. In the theoretical chapter of the thesis, the author reviewed literature on the topic of interruption-based advertisements themselves as a means for effective marketing in B2B companies. The author found benefits of this advertising method to be the low cost, opportunities for ad personalization through audience targeting, and high levels of consumer attention.

The author brought out the positive and negative reactions consumers have to these ads. The negative reactions being ad avoidance, either: cognitive (deliberately ignoring), behavioral (actively closing the ad), and affective (causing a negative feeling or emotion). These negative reactions pose great challenges for marketers, as they must try and reverse these reactions to create the opposite - positive emotions, behaviors, and cognitive reactions. A positive reaction to an ad that is commonly studied with ad effectiveness is the metric that measure clicks vs. views - clickthrough rate – a higher clickthrough rate is linked to more interest. There are many types of interruption-based advertisements that markers use, so the author compared 3 of the most studied: banners, overlays (pop-ups) and slide-ins to understand factors that influence consumer response. Those factors include but are not limited to: link text, perceived intrusiveness, ad personalization and data collection methods,

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the B2B consumer buying journey and messaging appeals. The author then brought out the definition and explanation of rational and emotional message appeals in advertisements. Studies agree that emotional messaging appeal increases the consumer retention, brand recognition, and nurturing relationships. However, for the B2B consumer and more rational buyer, it is questionable where the line is drawn between the two - non corporate level employees are more influenced by emotional appeals than C-level buyers who prefer the balance of facts with soft perspectives. Further, in that direction, the optimal balance between rational and emotional message is unclear, especially related to pop-up advertisements for the B2B market.

To understand further how rational and emotional messaging in pop-ups influence the clickthrough rate among a B2B audience, the author ran a two-part study. First, a qualitative test using neuromarketing technology was conducted among 25 working professionals to validate the emotionality of pop-up advertisement variations where headlines and images were tested and surveyed to understand their value, interest, and emotionality measures. The results of this test gave information on which ads to test in front of a larger audience with A/B tests on 2 product websites. It was conclusive from both tests that pop-up advertisements must provide an offer, or value to the website visitor. Alone, a rational or emotional message of any form (image, headline, subheading, etc.) will not be enough to influence consumers to click, at any stage of the buying journey. When the ads were tested on the website where the product is sold, there were zero conversions. On the other hand, the ads with emotional messaging tested on the website where the product is not the focus, caused higher clickthrough rate than its rational counterpart, and further leading them through the sales funnel to sign up and test the product. This shows the ad's emotional messaging was influential enough to interest the visitors to take the next steps forward, though there is room to study further any of the messaging combinations for different stages of the buying journey.

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Appendix A

Classifying message appeals in advertising

Rational Appeals	Emotional Appeals
Effectiveness	Exclusivity
Convenience	True to tradition
Cheapness	Pleasure
Naturalness	Youth
Sophistication	Modesty
Productivity	Openness
Obedience	Adventure
Modernity	Popularity
Use of technology	Magic
Safety	Relaxation
Cleanliness	Maturity
Health	Morality
Longevity	Humility
Independence	Fragility
	Protection
	Membership
	Sociality
	Carelessness
	Indomitable
	Assistance
	Sexuality
	Freedom
	Status
	Abjection
	Upholding
	Family
	Beauty
	Intimacy

Source: Albers-Miller, N. D., and Stafford, M. R. (1999).

Appendix B

Survey for participants in phase 2 of empirical research

You have been given the task from your employer to find a goal-setting software to use in your company, you land on a website and are reading about the product features when an advertisement pops-up on the screen. Before you close the ad, consider the following 4 questions.

As a potential buyer of software, which one headline would interest you to start a free product trial?

1. View, track, and manage OKRs with ease
2. 10x better performance with OKR software
3. Establish organizational structure, roles, and expectations with OKRs
4. Company-wide insights at your fingertips
5. "I wish I had this tool years ago..."
6. Serving thousands of companies since 2013
7. Be like Intel & Google

As a potential buyer of software, which one image would interest you to start a free product trial?

Option 1



Option 2



MESSAGING INFLUENCE ON CONSUMER RESPONSE IN B2B POP-UPS

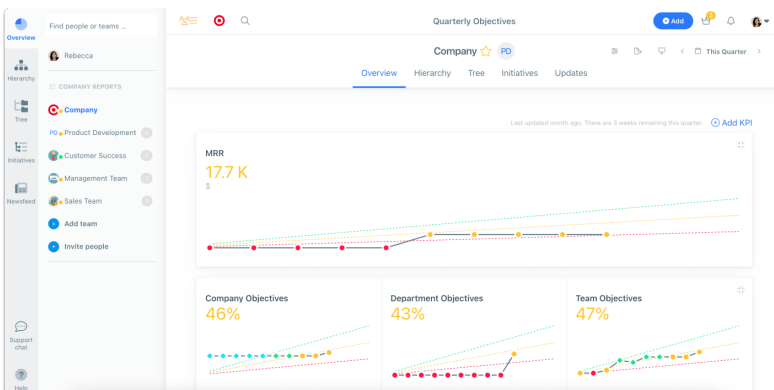
Option 3



Option 4



Option 5

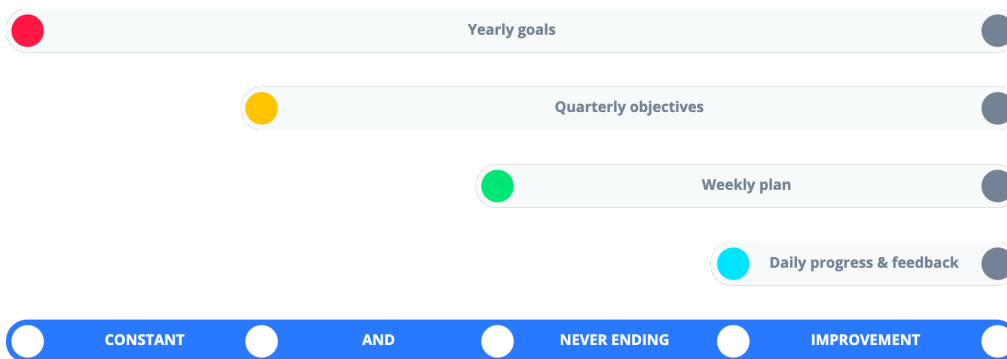


MESSAGING INFLUENCE ON CONSUMER RESPONSE IN B2B POP-UPS

Option 6



Option 7



Option 8



MESSAGING INFLUENCE ON CONSUMER RESPONSE IN B2B POP-UPS

As a potential buyer of software, which one image offered the most value to help you make your decision?

Option 1



Option 2

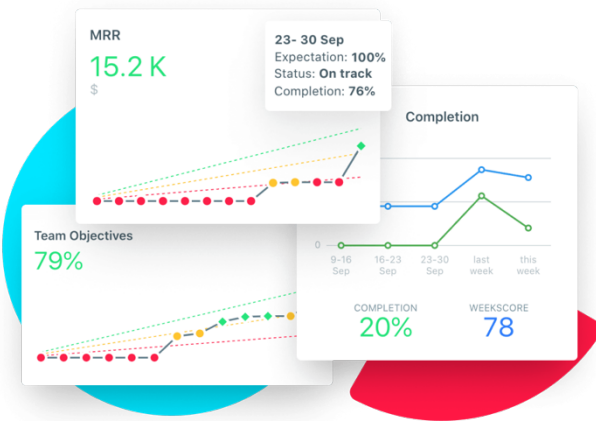


Option 3

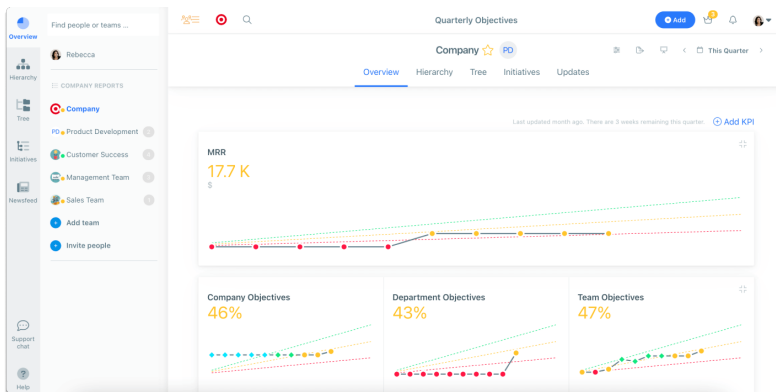


Option 4

MESSAGING INFLUENCE ON CONSUMER RESPONSE IN B2B POP-UPS



Option 5

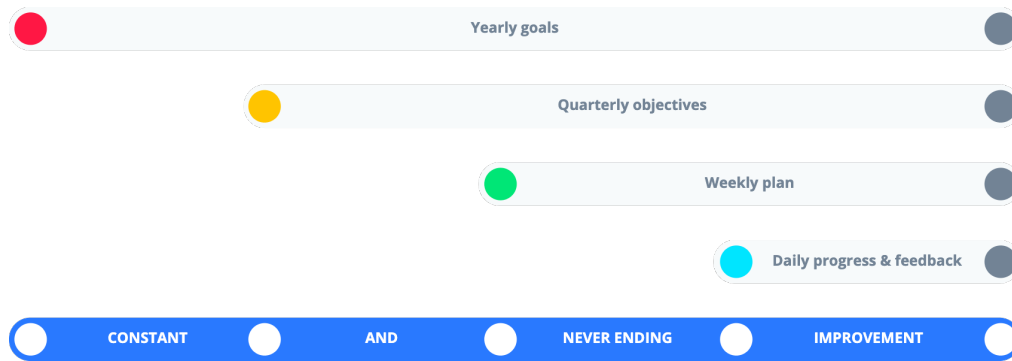


Option 6

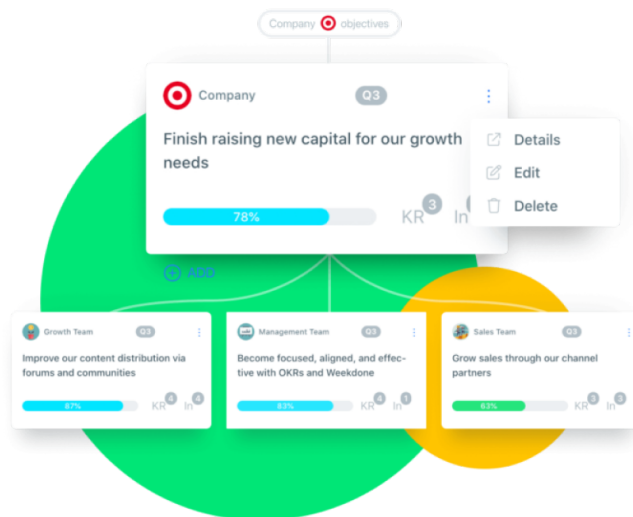


MESSAGING INFLUENCE ON CONSUMER RESPONSE IN B2B POP-UPS

Option 7



Option 8



As a potential buyer of software, which one headline offered the most value to help you make your decision?

1. View, track, and manage OKRs with ease
2. 10x better performance with OKR software
3. Establish organizational structure, roles, and expectations with OKRs
4. Company-wide insights at your fingertips
5. "I wish I had this tool years ago..."
6. Serving thousands of companies since 2013
7. Be like Intel & Google

Resümee

Selle lõputöö fookuses oli uurida, „ratsionaalsete vs emotsionaalsete sõnumite mõju tarbijakäitumisele äri- ja ärilise hüpikrekaamides: Weekdone'i näide“, kuidas ratsionaalne ja emotsionaalne sõnumivahetus mõjutab klientide käitumist hüpikrekaamides. Teoreetilise raamistiku loomiseks uuris autor teaduskirjandust teemal katkestuspõhised reklaamid kui digitaalse turunduse meetod B2B ettevõtetele. Autor leidis, et nende reklaamide eelisteks on madal hind, võimalused reklaamide isikupärastamiseks sihtrühma sihtimise kaudu ja tarbijate kõrge tähelepanu. Autor tõi välja tarbijate positiivsed ja negatiivsed reaktsioonid nendele reklaamidele. Negatiivne reaktsioon on reklaami vältimine: kas kognitiivne (sihilik ignoreerimine), käitumuslik (reklaami aktiivne sulgemine) või afektiivne (negatiivse tunde või emotsiooni tekitamine). Need negatiivsed reaktsioonid seavad turundajatele suuri väljakutseid, sest nad loodavad saada hoopis positiivseid reaktsioone.

Autor kasutab reklaamide tõhususe hindamiseks klikkimise määra – levinud mõõdikut, mis on klikkide ja vaatamiste vahe. Suurem klikkimise määr on seotud positiivsemate reaktsioonide või tõhusama reklaamiga. Katkestuspõhiste reklaamide tõhususe kohta on tehtud palju uuringuid. Et mõista tarbijate reageerimist mõjutavaid tegureid, käsitles autor kolme enim uuritud katkestuspõhist reklaamitüüpi: bannereid, ülekatteid (hüpikaknad) ja slaide. Selgus, et mõjutegurid hõlmavad (kuid mitte ainult) lingiteksti, tajutavat pealetükkivust, reklaamide isikupärastamist ja andmete kogumise meetodeid, B2B tarbijate ostuteekonda ja sõnumside üleskutseid. Seejärel tõi autor välja reklaamides sisalduvate ratsionaalsete ja emotsionaalsete sõnumipöördumiste definitsiooni ja seletuse. Senised uuringud osutavad, et emotsionaalne sõnumite atraktiivsus suurendab tarbijate hoidmist, kaubamärgi tuntuust ja suhteid. Kuigi B2B tarbijat peetakse tavaliselt "ratsionaalsemaks ostjaks", on siiski ebaselge, kust tõmmata piir ratsionaalse ja emotsionaalse sõnumi meeldivuse vahel. Mitte-ettevõtte tasandil töötajaid mõjutavad emotsionaalsed pöördumised rohkem kui ettevõtte tasandil ostjaid, kes eelistavad pehmemate "emotsionaalsete" perspektiividega faktide tasakaalu. Lisaks on selles suunas ebaselge optimaalne tasakaal ratsionaalse ja emotsionaalse sõnumi vahel, eriti seoses B2B turu hüpikrekaamidega.

Püüdes täita uurimislünka selle kohta, kuidas hüpikakende ratsionaalne ja emotsionaalne sõnum mõjutab B2B vaatajaskonna klikkimise määra, viis autor läbi kaheosalise uuringu. Esiteks viidi 25 töötava professionaali seas läbi neuroturundustehnoloogiat kasutav kvalitatiivne test, et kinnitada hüpikrekaamide variatsioonide emotsionaalsust. Selle käigus testiti ja uuriti pealkirju ja pilte, et mõista nende väärtust, huvipakkuvust ja emotsionaalsust. Need tulemused aitasid kitsendada uuringu 2.

faasi reklaame kahel A/B-testidega veebisaidil. Mõlema testi põhjal selgus, et hüpickreklaamid peavad pakkuma veebisaidi küllastajale pakkumist või väärtust. Üksnes mis tahes vormis ratsionaalsest või emotsionaalsest sõnumist (pilt, pealkiri, alapealkiri jne) ei piisa, et mõjutada tarbijaid ostuteekonna mis tahes etapis klikkima. Kui reklaame testiti veebilehel, kus toodet müüakse, ei toimunud konversioone. Teisest küljest põhjustasid emotsionaalse sõnumiga reklaamid, mida testiti veebisaidil, kus toode ei ole fookuses, kõrgemat klikkimise määra kui selle ratsionaalsed vasted.

Võib öelda, et emotsionaalse sõnumiga hüpickreklaam oli piisavalt mõjukas, et huvitada küllastajaid järgmisi samme astuma. Ainuüksi selle uuringu põhjal ei saa aga kõigi B2B ettevõtete puhul üldistada, kas üks sõnumiapell mõjub teisest paremini. Turundajad peaksid testimise mis tahes sõnumite kombinatsioone ostuteekonna erinevatel etappidel veebisaidi erinevatel lehtedel. Üks piirang, mis autoril oli uuringu ajal, on see, et testimisperioodil käitati erinevate kampaaniate jaoks muid hüpickaknaid. See tähendab, et on võimalik, et küllastaja võis veebisaidil ühe seansi jooksul saada rohkem kui ühe reklaami, põhjustades suuremat ärritust.

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